

No. 637,423.

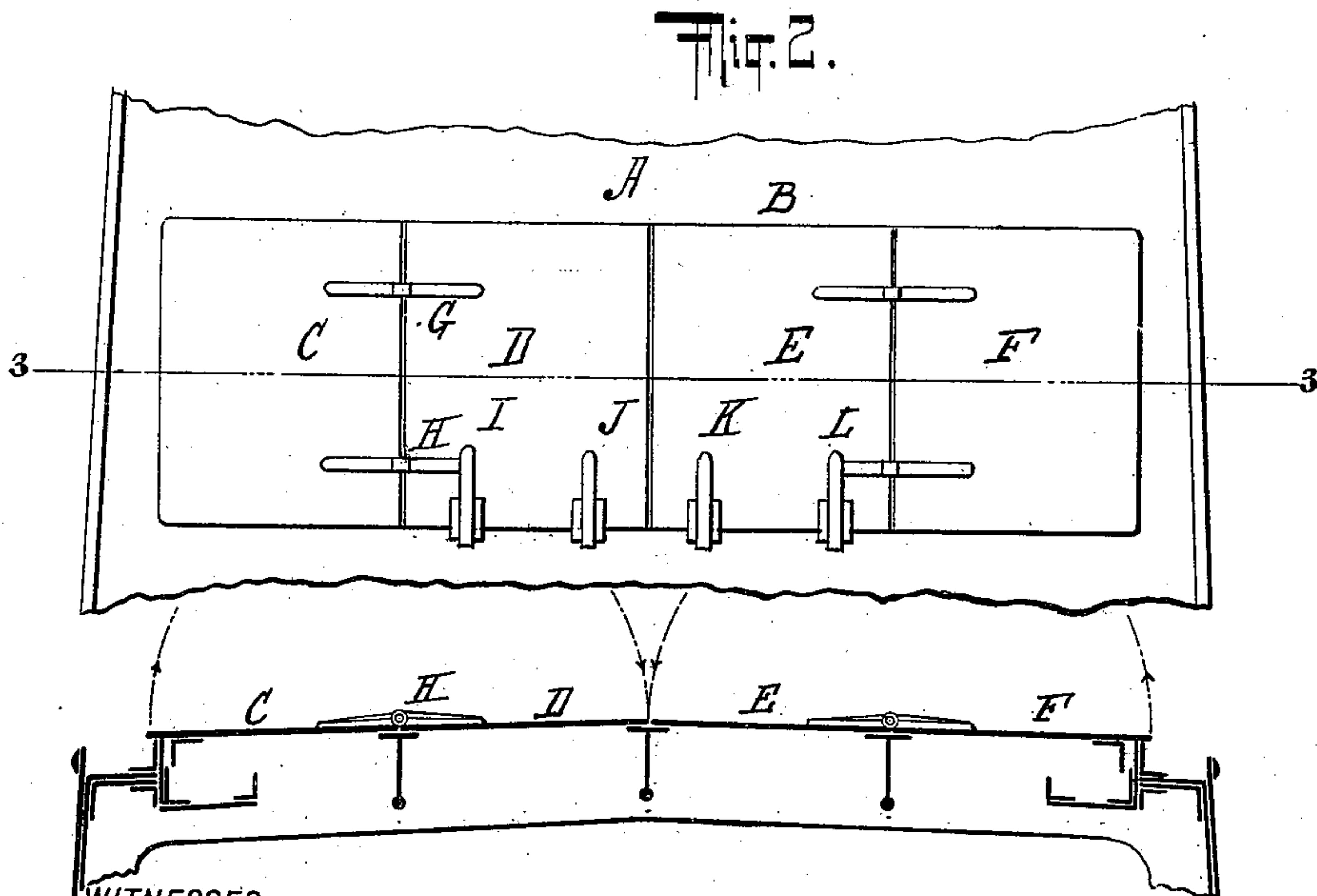
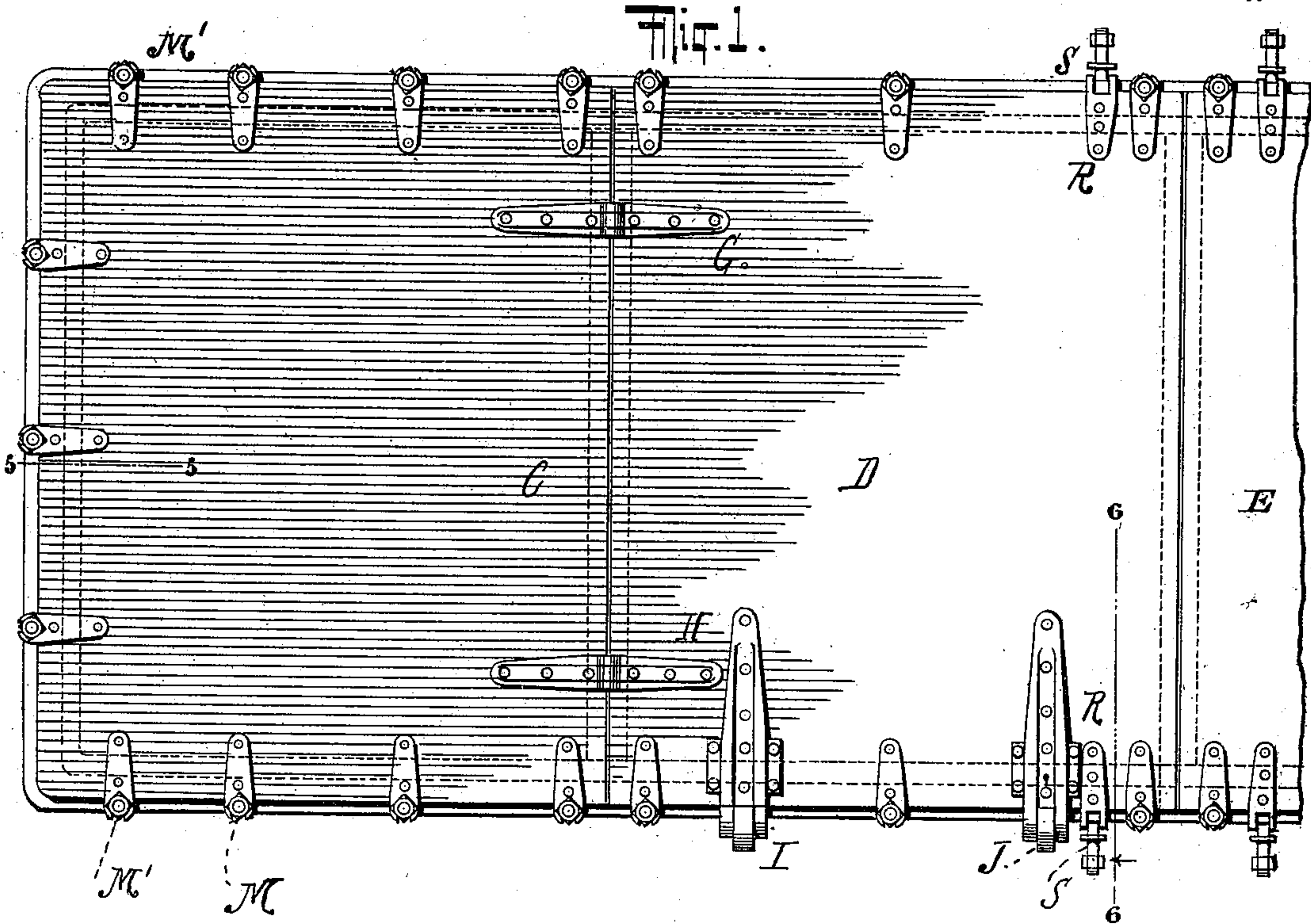
Patented Nov. 21, 1899.

H. SEE.
CROSS HATCH COVER.

(Application filed June 10, 1899.)

(No Model.)

2 Sheets—Sheet 1.



WITNESSES:

Gustav Nitzsch
John Schlenker

Fig. 3.

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Horace See
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2 Sheets—Sheet 2.

Fig. 4.

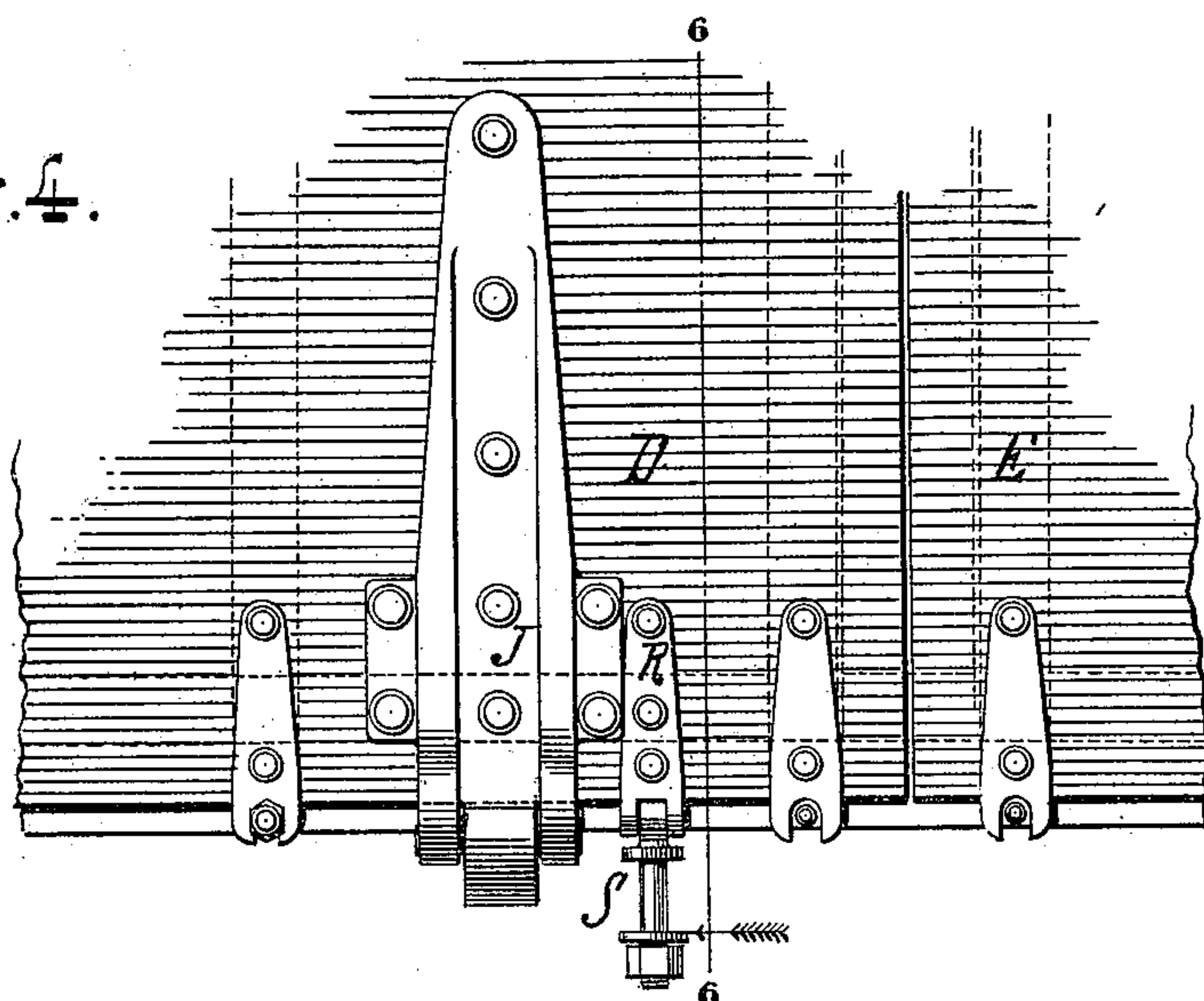


Fig. 5.

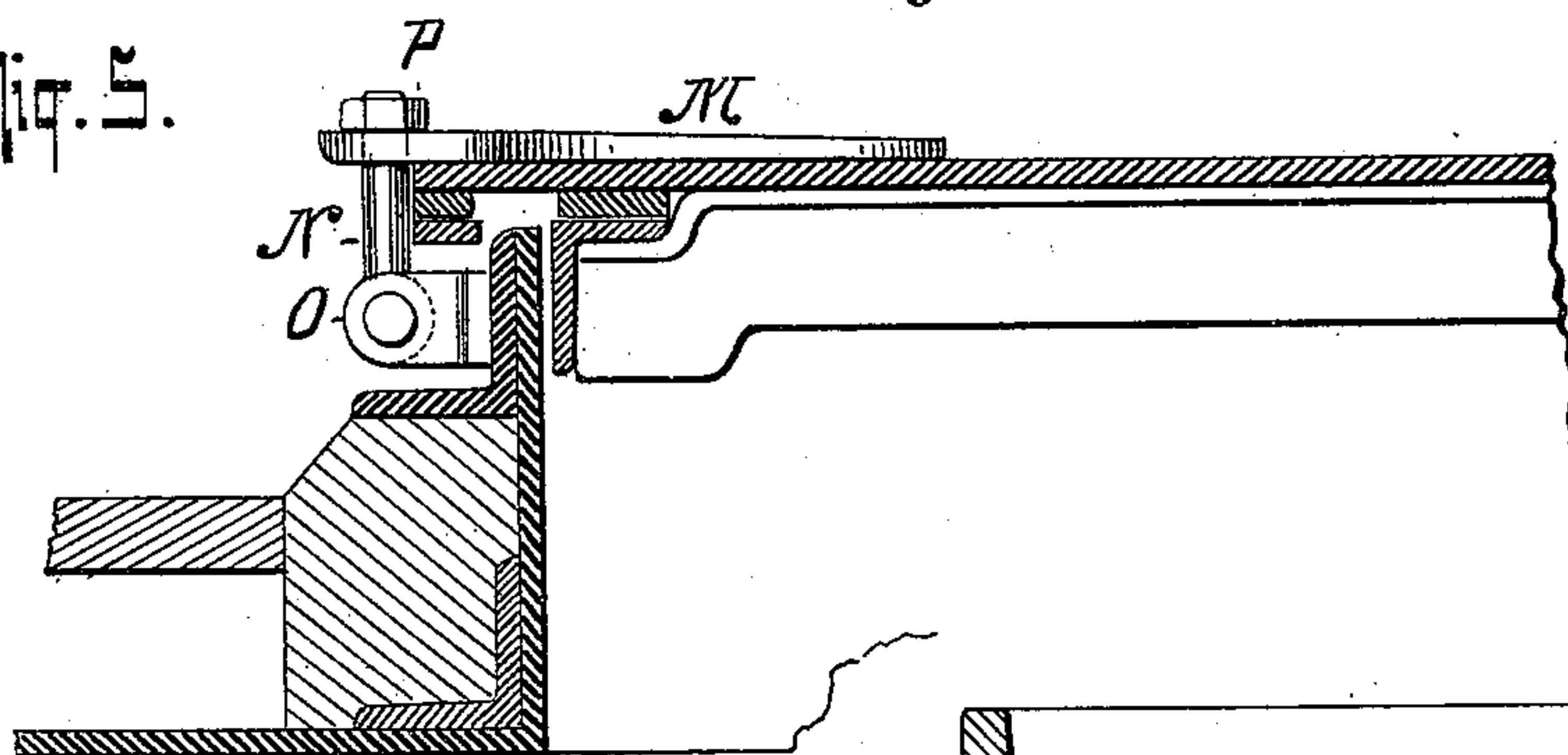
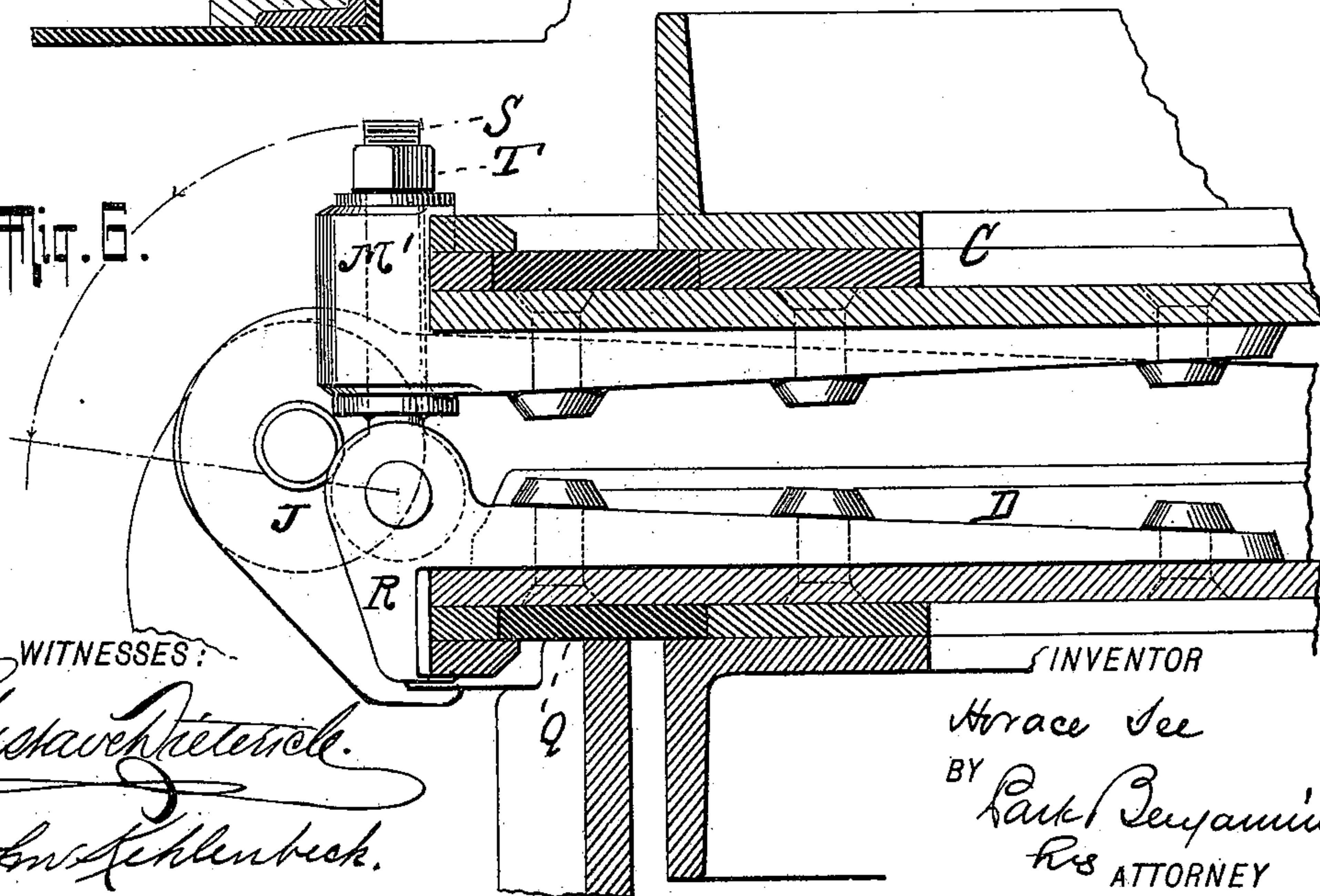


Fig. 6.



WITNESSES:

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UNITED STATES PATENT OFFICE.

HORACE SEE, OF NEW YORK, N. Y.

CROSS-HATCH COVER.

SPECIFICATION forming part of Letters Patent No. 637,423, dated November 21, 1899.

Application filed June 10, 1899. Serial No. 720,025. (No model.)

To all whom it may concern:

Be it known that I, HORACE SEE, of the city, county, and State of New York, have invented a new and useful Improvement in Cross-Hatch Covers for Vessels, of which the following is a specification.

My invention relates to a cover used to close the cross-hatches of vessels.

My invention consists in such a cover made in sections, the said sections being arranged in pairs and connected together, so that either member of a pair of sectional covers may be folded back one upon the other and secured in folded position. One member of each pair may also be hinged to the vessel, so that after the folding is done the pair of folded members may be turned sidewise to completely expose the hatch-opening. I may use any number of such pairs of folding sectional covers.

In the accompanying drawings, Figure 1 is a plan view showing two sectional covers and a part of a third in place upon the hatch. Fig. 2 is a plan view of a part of the deck of a vessel, showing two pairs of sectional covers in place and closing the hatch. Fig. 3 is a sectional view on the line 3 3 of Fig. 2. Fig. 4 is a detail plan view showing more particularly the arrangement of the fastening-bolt for the sectional covers. Fig. 5 is an enlarged detail section on the line 5 5 of Fig. 1. Fig. 6 is an enlarged detail section on the line 6 6 of Figs. 1 and 4.

Similar letters of reference indicate like parts.

Referring first to Fig. 2, A represents a portion of the deck of a vessel. The cross-hatch cover B as here shown is composed of two pairs of sectional covers, C and D being one pair and E and F another pair. The number of pairs of sectional covers making up the complete cover is not material and will depend upon the width of the hatch, so that I may use two, three, or more pairs, as may be desirable. Each pair of covers, as C and D, is connected together by hinges G and H, and, as shown in Fig. 2, each inboard section, as D or E, is connected by hinges I J or K L to the vessel. It will be seen, therefore, that I may fold the section C upon section D, and I may turn section D upon its hinges I and J, so as to expose so much of the hatch-

opening as is covered by the sections C and D, or if it be desired to expose only so much of the opening of the hatch as is covered by the section C then I have only to turn the section C back upon the section D. Similarly with regard to the sections E and F by turning the section F back upon the section E and then turning the two sections upon the hinges K and L, I expose all that part of the hatch which is covered by the sections E and F. Consequently I may open the hatch beneath the section C or beneath the section F or beneath the sections C and D or beneath the sections E and F or I may by throwing back all of these sections expose the entire hatch-opening. By taking out the hinge-pins of the hinges I J K L and thus detaching the sections D and E from the hatch I may fold the section E back upon the section F and the section D back upon the section C, thus exposing the middle portion of the hatch-opening, which is covered by the sections D and E.

Around the edges of each of the sections are a number of fixed plates, as M, each having an opening to receive a swinging bolt, as N, which is pivoted in lugs O to the hatch-coaming. The bolts N are provided with nuts P, by which when they are inserted in the openings of the plates M the sectional covers C and D and E and F are firmly secured in place. In order to make the joint perfectly tight, I provide on the under side of each of the sections a layer of rubber, as Q, which is forced against the upper edge of the hatch-coaming when the nuts P are set up.

Pivoted in brackets R on the inboard sectional covers, as D and E, are swinging bolts S. When the outboard covers C and F are folded back upon the inboard covers D and E, then the plates M' of cover C, for example, come over the brackets R of the cover D, for example, so that the bolt S may enter the jaws of plate M' and be set up by nuts, as T. In this way the cover C after being folded over is secured to the cover D and similarly the cover F to the cover E.

I claim—

1. In a cross-hatch cover for vessels, two sectional covers C and D, hinged together so that

either member of the pair can be turned or folded back upon the other, substantially as described.

5 2. In a cross-hatch cover for vessels, two sectional covers C and D, hinged together so that either member of the pair can be turned or folded back upon the other and means for securing said members together in folded position, substantially as described.

10 3. In a cross-hatch cover for vessels, two sectional covers C and D, hinged together so that either member of the pair can be turned or folded back upon the other and hinge connections between the edge of one member and
15 the vessel whereby said members when folded together can be turned in a direction at right angles to the fold, to uncover the hatch-opening, substantially as described.

20 4. In a cross-hatch cover for vessels, two sectional covers C, D hinged together so that either member of the pair can be turned or folded back upon the other, means for securing said members together in folded position, and hinge connections between the edge of
25 one member and the vessel whereby said

members when folded together can be turned in a direction at right angles to the fold to uncover the hatch-opening.

5. In a cross-hatch cover for vessels, two sectional covers C and D hinged together so that
30 each member of the pair can be turned or folded back upon the other and means for detachably hinging one of said members to the vessel, substantially as described.

6. In a cross-hatch cover for vessels, a plurality of pairs of sectional covers, the members of each of said pairs being hinged together so that either member of each pair can be turned or folded back upon the other member, substantially as described. 40

7. The combination of the hinged sectional covers C, D, the cover D being provided with a pivoted bolt S and the cover C with a plate M' adapted to receive said bolt, when said covers are folded together, substantially as
45 described.

HORACE SEE.

Witnesses:

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H. R. MOLLER.